



Australian Government
Repatriation Medical Authority

Statement of Principles
concerning

PULMONARY THROMBOEMBOLISM

No. 57 of 2012

for the purposes of the

Veterans' Entitlements Act 1986
and
Military Rehabilitation and Compensation Act 2004

Title

1. This Instrument may be cited as Statement of Principles concerning pulmonary thromboembolism No. 57 of 2012.

Determination

2. The Repatriation Medical Authority under subsection **196B(3)** and **(8)** of the *Veterans' Entitlements Act 1986* (the VEA):
 - (a) revokes Instrument No. 4 of 2001 concerning pulmonary thromboembolism; and
 - (b) determines in its place this Statement of Principles.

Kind of injury, disease or death

3.
 - (a) This Statement of Principles is about **pulmonary thromboembolism** and **death from pulmonary thromboembolism**.
 - (b) For the purposes of this Statement of Principles, "**pulmonary thromboembolism**" means obstruction of the pulmonary artery or one of its branches by a mass of clotted blood.
 - (c) Pulmonary thromboembolism attracts ICD-10-AM code I26.
 - (d) In the application of this Statement of Principles, the definition of "**pulmonary thromboembolism**" is that given at paragraph 3(b) above.

Basis for determining the factors

4. On the sound medical-scientific evidence available, the Repatriation Medical Authority is of the view that it is more probable than not that **pulmonary thromboembolism** and **death from pulmonary thromboembolism** can be related to relevant service rendered by veterans or members of the Forces under the VEA, or members under the *Military Rehabilitation and Compensation Act 2004* (the MRCA).

Factors that must be related to service

5. Subject to clause 7, at least one of the factors set out in clause 6 must be related to the relevant service rendered by the person.

Factors

6. The factor that must exist before it can be said that, on the balance of probabilities, **pulmonary thromboembolism** or **death from pulmonary thromboembolism** is connected with the circumstances of a person's relevant service is:
 - (a) having a deep vein thrombosis within the three months before the clinical onset of pulmonary thromboembolism; or
 - (b) having venous thrombosis within the three months before the clinical onset of pulmonary thromboembolism; or
 - (c) having a cardiac disease from the specified list within the three months before the clinical onset of pulmonary thromboembolism; or
 - (d) smoking at least two pack-years of cigarettes, or the equivalent thereof in other tobacco products, within the three years before the clinical onset of pulmonary thromboembolism, and where smoking has ceased, the clinical onset of pulmonary thromboembolism has occurred within three months of cessation; or
 - (e) having a neurological disease causing motor impairment within the three months before the clinical onset of pulmonary thromboembolism; or
 - (f) having restricted mobility for a continuous period of at least four hours within the four weeks before the clinical onset of pulmonary thromboembolism; or
 - (g) being an inpatient in a hospital or a resident in a nursing home for a continuous period of at least seven days, within the three months before the clinical onset of pulmonary thromboembolism; or
 - (h) having surgery requiring a general, spinal or epidural anaesthetic within the three months before the clinical onset of pulmonary thromboembolism; or
 - (i) having a central venous catheter, indwelling cardiac pacemaker or defibrillator leads, or implantation of another intravenous device for a continuous period of at least 24 hours within the three months before the clinical onset of pulmonary thromboembolism; or

- (j) having an injury or illness as specified within the three months before the clinical onset of pulmonary thromboembolism; or
- (k) immobilisation of the upper or lower limb in a plaster cast or similar restraining device for a continuous period of at least seven days within the three months before the clinical onset of pulmonary thromboembolism; or
- (l) having a malignant neoplasm at the time of the clinical onset of pulmonary thromboembolism; or
- (m) being treated with a drug or a drug from a class of drugs from the specified list, within the two months before the clinical onset of pulmonary thromboembolism; or
- (n) using hormone replacement therapy or using combined oestrogen-progestin contraception for a continuous period of at least four weeks, within the two months before the clinical onset of pulmonary thromboembolism; or
- (o) having an autoimmune disease or inflammatory vasculitis from the specified list at the time of the clinical onset of pulmonary thromboembolism; or
- (p) having a hypercoagulable state at the time of the clinical onset of pulmonary thromboembolism; or
- (q) being obese at the time of the clinical onset of pulmonary thromboembolism; or
- (r) being pregnant or being within the two months postpartum, at the time of the clinical onset of pulmonary thromboembolism; or
- (s) being infected with human immunodeficiency virus before the clinical onset of pulmonary thromboembolism; or
- (t) having cytomegalovirus infection of new onset within the six weeks before the clinical onset of pulmonary thromboembolism; or
- (u) having chronic bronchitis or emphysema at the time of the clinical onset of pulmonary thromboembolism; or
- (v) having nephrotic syndrome, or any acute or chronic renal disease requiring dialysis or renal transplantation, at the time of the clinical onset of pulmonary thromboembolism; or
- (w) having an aneurysm of a vein in the deep venous system at the time of the clinical onset of pulmonary thromboembolism; or
- (x) experiencing animal envenomation from the bite of a viper, *Crotalinae* spp or *Bitis gabonica* within the seven days before the clinical onset of pulmonary thromboembolism; or
- (y) inability to obtain appropriate clinical management for pulmonary thromboembolism.

Factors that apply only to material contribution or aggravation

7. Paragraph 6(y) applies only to material contribution to, or aggravation of, pulmonary thromboembolism where the person's pulmonary thromboembolism was suffered or contracted before or during (but not arising out of) the person's relevant service.

Inclusion of Statements of Principles

8. In this Statement of Principles if a relevant factor applies and that factor includes an injury or disease in respect of which there is a Statement of Principles then the factors in that last mentioned Statement of Principles apply in accordance with the terms of that Statement of Principles as in force from time to time.

Other definitions

9. For the purposes of this Statement of Principles:

"a cardiac disease from the specified list" means:

- (a) acute myocardial infarction;
- (b) congestive cardiac failure; or
- (c) thrombus within the right atrium or right ventricle;

"a drug or a drug from a class of drugs from the specified list" means:

- (a) anti-psychotic drugs;
- (b) bevacizumab;
- (c) cytotoxic agents for a malignant disease;
- (d) desmopressin acetate;
- (e) erythropoiesis-stimulating agents (erythropoietin, darbepoietin);
- (f) intravenous thrombin or fibrin sealant;
- (g) lenalidomide;
- (h) selective oestrogen receptor modulators; or
- (i) thalidomide;

"a hypercoagulable state" means:

- (a) acquired activated protein C resistance;
- (b) acquired antithrombin III deficiency;
- (c) acquired protein C deficiency;
- (d) acquired protein S deficiency;
- (e) antiphospholipid antibody syndrome;
- (f) cirrhosis of the liver;
- (g) disseminated intravascular coagulation;
- (h) heparin-induced thrombocytopenia;
- (i) hyperhomocysteinaemia;
- (j) hyperthyroidism;
- (k) hypothyroidism;
- (l) inability to access anticoagulant treatment for an existing coagulation disorder;
- (m) monoclonal gammopathy of undetermined significance;
- (n) myeloproliferative disease; or

(o) thrombocytosis;

"a neurological disease causing motor impairment" means loss or impairment of motor function of a limb, occurring in cerebrovascular accident, peripheral neuropathy, Guillain Barre syndrome, non-traumatic spinal cord disease, neurological infection or neuro-muscular degenerative diseases, including demyelinating diseases, parkinsonian syndromes, dementia and muscular dystrophies;

"an autoimmune disease or inflammatory vasculitis from the specified list" means:

- (a) antineutrophil cytoplasmic antibodies-associated vasculitis (Churg–Strauss syndrome, microscopic polyangiitis, Wegener’s granulomatosis);
- (b) Behçet’s disease;
- (c) diabetes mellitus;
- (d) inflammatory bowel disease;
- (e) polyarteritis nodosa;
- (f) systemic lupus erythematosus; or
- (g) thromboangiitis obliterans (Buerger’s disease);

"an injury or illness as specified" means:

- (a) a fracture or crush injury of the clavicle or humerus, or a bone in the spinal column, pelvis, hip, chest, or lower limb (femur, tibia, fibula);
- (b) a moderate to severe traumatic brain injury;
- (c) a physical injury or illness requiring mechanical ventilation support or admission to an intensive care unit;
- (d) a spinal cord injury; or
- (e) a tear, rupture or avulsion of a muscle, tendon or ligament in the lower limb;

"being obese" means an increase in body weight by way of fat accumulation which results in a Body Mass Index (BMI) of 30 or greater.

The $BMI = W/H^2$ and where:

W is the person’s weight in kilograms and

H is the person’s height in metres;

"death from pulmonary thromboembolism" in relation to a person includes death from a terminal event or condition that was contributed to by the person’s pulmonary thromboembolism;

"having restricted mobility" means gross diminution and near complete absence of movement of a lower limb while sitting or reclining in a cramped or restricted space, such as may occur during travel by road, rail or air;

"hormone replacement therapy" means administration of oestrogen preparations often in combination with progesterone to offset a hormone deficiency following surgically induced or naturally occurring menopause;

"ICD-10-AM code" means a number assigned to a particular kind of injury or disease in The International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification (ICD-10-AM),

Seventh Edition, effective date of 1 July 2010, copyrighted by the National Centre for Classification in Health, Sydney, NSW, and having ISBN 978 1 74210 154 5;

"pack-years of cigarettes, or the equivalent thereof in other tobacco products" means a calculation of consumption where one pack-year of cigarettes equals 20 tailor-made cigarettes per day for a period of one calendar year, or 7300 cigarettes. One tailor-made cigarette approximates one gram of tobacco or one gram of cigar or pipe tobacco by weight. One pack-year of tailor-made cigarettes equates to 7.3 kilograms of smoking tobacco by weight. Tobacco products means either cigarettes, pipe tobacco or cigars smoked, alone or in any combination;

"relevant service" means:

- (a) eligible war service (other than operational service) under the VEA;
- (b) defence service (other than hazardous service and British nuclear test defence service) under the VEA; or
- (c) peacetime service under the MRCA;

"terminal event" means the proximate or ultimate cause of death and includes:

- (a) pneumonia;
- (b) respiratory failure;
- (c) cardiac arrest;
- (d) circulatory failure; or
- (e) cessation of brain function;

"venous thrombosis" means an aggregation of blood factors, primarily platelets and fibrin with entrapment of cellular elements, in a retinal, cerebral, hepatic, renal, portal, mesenteric or pulmonary vein, the greater or lesser saphenous veins or their tributaries, or another location in the superficial venous system.

Application

- 10.** This Instrument applies to all matters to which section 120B of the VEA or section 339 of the MRCA applies.

Date of effect

11. This Instrument takes effect from 5 September 2012.

Dated this *twenty-seventh* day of *August* 2012

The Common Seal of the
Repatriation Medical Authority
was affixed to this instrument
at the direction of:

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PROFESSOR NICHOLAS SAUNDERS AO
CHAIRPERSON